

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1–12. (Cancelled)

Claim 13. (Currently amended) A method for megasonic cleaning of semiconductor wafers comprising the steps of:

generating two or more parallel megasonic waves in a cleaning fluid, the megasonic waves having a common direction of travel, wherein each of the megasonic waves is generated by a piezoelectric transducer having an upper surface with a long edge and a short edge, the upper surface facing the cleaning fluid or being substantially parallel with the most proximate boundary of the cleaning fluid;

immersing the wafers in the cleaning fluid; and

moving the wafers in the cleaning fluid through two or more of said megasonic waves in a direction that is generally parallel to the short edge of the upper surface of the piezoelectric transducer.

Claim 14. (Previously presented) The method of claim 13 wherein the megasonic waves are generated across parallel regions of the fluid and the step of moving the wafers comprises reciprocating the wafers through at least two of said parallel regions.

Claims 15–26. (Cancelled)

Claim 27. (Currently amended) A method for megasonic cleaning of semiconductor wafers comprising the steps of:

generating two or more parallel megasonic waves in a cleaning fluid, wherein each of the megasonic waves is generated by a piezoelectric transducer having an upper

surface with a long edge and a short edge, the upper surface facing the cleaning fluid or being substantially parallel with the most proximate boundary of the cleaning fluid;

immersing the wafers in the cleaning fluid such that faces of the wafers are perpendicular to the short edge of the upper surface of the piezoelectric transducer; and moving the wafers in the cleaning fluid through said megasonic waves in a direction that is generally parallel to the short edge of the upper surface of the piezoelectric transducer.

Claim 28. (Previously presented) The method of claim 13 wherein the megasonic waves are generated at the bottom of a reservoir holding the cleaning fluid and travel toward the top of the fluid and the wafers are inserted vertically at the top of the fluid until they are covered with fluid and the wafers are reciprocated horizontally while covered with fluid.

Claim 29. (Previously presented) The method of claim 27 wherein the megasonic waves are generated at the bottom of a reservoir holding the cleaning fluid and travel toward the top of the fluid and the wafers are inserted vertically at the top of the fluid until they are covered with fluid and the wafers are reciprocated horizontally while covered with fluid.